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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,161	07/24/2000	Yasuharu Iwaki	Q58742	5436

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EXAMINER
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NGUYEN, MADELEINE ANH VINH

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/624,161

Applicant(s)

IWAKI, YASUHARU

Examiner

Madeleine AV Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12, 14 and 17-24 is/are allowed.
- 6) ☒ Claim(s) 13 and 15 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed September 20, 2005 have been fully considered but they are not persuasive for the following reasons:

A. Applicant remarks that Matama does not teach or suggest or provide motivation for the claimed image-correcting amount computing unit. The examiner asserts that the image correction amount is computed by an operator's input and not based on image data.

It is noted that in the rejection, "Matama does not directly teach that the computing unit 10 is for computing a proper amount of image correction." That means although Matama does not specifically mention in exact words that computer unit 10 is for computing a proper amount of image correction. However, throughout the discussion, the examiner concludes that Matama indirectly teaches that Matama teaches the above limitation. For instance, Furthermore, in the Specification, Matama teaches, "the gain M and the gain H, which have been calculated by the automatic set-up operation unit 10." (col. 12, lines 58-61), "In the automatic set-up operation unit 10, the gain M and the gain H are set such that  $\text{gain M} < \text{gain H}$ . Specifically, the roughness of the luminance components due to the film roughness of the luminance components due to the film graininess is contained primarily in the middle frequency components. Therefore, the gain M of the middle frequency components  $Y_m$  is set to be comparatively small, and the rough feeling is thereby restricted ... and the sharpness of the processed image is thereby emphasized." (col. 13, lines 2-13), "in cases where the color image 4 is an under-exposed negative film, the

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roughness due to the film graininess becomes perceptible. Also, in cases where the gradation is raised in order to improve the gradation characteristics, an image is obtained in which the graininess is very bad. Therefore, in such cases, by the automatic set-up operation unit 10, the gain M is set to be very small. In this manner, the graininess can be restricted markedly.” (col. 13, lines 14-21), and “a reproduced image is thus obtained, in which the sharpness has been emphasized and the roughness due to the film graininess has been restricted.” (col. 13, line 66 – col. 14, line 2). Thus, the computing unit 10 calculates the proper amount of image correction such as gain M and gain H for correcting the roughness or graininess, gradation or sharpness of the reproduced image. In addition, Matama further teaches, “In such case, the processing can be carried out in accordance with the type of the image” (col. 13, lines 30-31). For instance, “After the flesh-color region has thus been detected, the values of the gain M and the gain H with respect to the flesh-color region are changed.” (col. 15, lines 4-6), “the specific color region is detected from the image, and the values of the gains with respect to the specific color regions are changed.” (col. 15, lines 40-42) or “the values of the gain M and the gain H may be changed with respect to the sky blue region.” (col. 15, lines 50-51). Thus, the proper amount of image correction, e.g. the gain M or the gain H, is computed based on image data.

B. Applicant remarks that the proper amount of image correction is computed prior to the input operation for verification in claims 13 and 15 and this is entirely different in Matama, where the image correction is not computed prior to any sort of an input operation for verification.

Matama teaches that “in case where a desired menu is selected by the user from a plurality of sharpness emphasis processing menus, values of the gain M and the gain H, which

are appropriate for the respective menu, should preferably be stored as a table such that the appropriate values of the gain M and the gain H can be selected in accordance with the selection of the menu.” (col. 13, lines 30-32). Thus the proper amount of image correction (gains M and H) is computed prior to the input operation selected by a user and saved in a table such that appropriate values of the gain M and the gain H can be selected in accordance with the selection of the menu.

C. Applicant remarks that an image belonging to a group of images in which correction is performed in different directions is selected in the present invention while Matama fails to teach that.

As state above, Matama teaches that correction is performed in different directions in different image regions or groups such as the flesh-color region (e.g. a pattern of a face of a human body), a specific color region (e.g. a sky blue region). For instance, “After the flesh-color region has thus been detected, the values of the gain M and the gain H with respect to the flesh-color region are changed.” (col. 15, lines 4-6), “the specific color region is detected from the image, and the values of the gains with respect to the specific color regions are changed.” (col. 15, lines 40-42) or “the values of the gain M and the gain H may be changed with respect to the sky blue region.” (col. 15, lines 50-51). Thus, Matama discloses the teaching of image belonging to a group of images in which correction is performed in different directions is selected as claimed.

D. Applicant remarks that the sharpness processing menus 11A is not a verifying unit since it only allow a user to choose a desirable operation and not for verifying an image belonging to a group of images in which correction is performed in different directions.

The user can see the visible image displayed on the CRT display device 11 for verifying the image data. For instance, the user can verify the group of images the image belongs to for the sharpness selection since the gain M and the gain H are set based on different regions or colors of the image and they are previously calculated and stored in a table (col. 13, lines 23-32). In addition, the user can also verify the printing size of the image, the landscape or portrait format of the image or other information relating to the image (col. 21, lines 31-59). Thus, together with the CRT display device, the menus 11A is for an operator performing verification.

From the above discussion, it is concluded that the rejection of claims 13 and 15 are maintained.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matama (US Patent No. 5,739,922).

Concerning claim 13, Matama discloses an image processing apparatus (Fig.1) comprising an image amount computing unit (10) for computing a proper amount of image component based on image data of an image of an original delivered from an image input unit (1) by which the image data of the image of the original was input by photo-electrically reading the image of the original; an image processing unit (13, 14) for performing image processing

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based on the proper amount of image component computed by the image amount computing unit to thereby produce a processed image; a display unit (11) for displaying for monitoring the processed image obtained by the image processing unit; and a verifying unit (11A) in which an operator performs an input operation for verifying an image belonging to a group of images in which image processing is performed in different directions for the proper amount of image component computed by the image amount computing unit; wherein the input operation for verifying the image is performed by the operator prior to the image processing (col. 10, line 13 – col. 11, line 15; col. 21, lines 31-59).

Matama does not directly teach that the computing unit 10 is for computing a proper amount of image correction. However, it is noted that the signal S1 input from the user via interface 12 is for computing gain M, gain H, or for calculating the degrees of the emphasis and the restriction which is consider as the proper amount of image correction since Matama teaches that a correction amount can be specified or calculated based on the signal S1 or selected conditions input from the operator (col. 5, lines 19-26; col. 21, lines 31-59). It would have been obvious to one skilled in the art at the time the invention was made to consider the computing unit 10 in Matama is for computing a proper amount of image correction since Matama teaches that the user can enter a correction amount such that a desired image processing can be carried out and the menu 11A is for selecting different sharpness process for graininess restriction and sharpness emphasis process which is considered as image correction process.

Concerning claim 15, Matama discloses an image processing method (Fig. 1) comprising the steps of computing a proper amount of image component (10) based on image data of an image of an original input by photo-electrically reading the image of the original (1); performing

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image processing (13, 14) based on the thus computed proper amount of image component; and outputting a processed image (16) based on results of the image processing; wherein an image belonging to a group of images in which correction is performed in different directions for the proper amount of image component is identified and displayed on a display unit (11) to ask for an operator's input instruction prior to the image processing (col. 10, line 13 – col. 11, line 15; col. 21, lines 31-59).

Matama does not directly teach that the computing unit 10 is for computing a proper amount of image correction. However, it is noted that the signal S1 input from the user via interface 12 is for computing gain M, gain H, or for calculating the degrees of the emphasis and the restriction which is consider as the proper amount of image correction since Matama teaches that a correction amount can be specified or calculated based on the signal S1 or selected conditions input from the operator (col. 5, lines 19-26; col. 21, lines 31-59). It would have been obvious to one skilled in the art at the time the invention was made to consider the computing unit 10 in Matama is for computing a proper amount of image correction since Matama teaches that the user can enter a correction amount such that a desired image processing can be carried out and the menu 11A is for selecting different sharpness process for graininess restriction and sharpness emphasis process which is considered as image correction process.

***Allowable Subject Matter***

3. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



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4. Claims 1-12, 14, 17-24 are allowed.

The following is an Examiner's Statement of Reasons for Allowance: Claim 24 is allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior art which teaches an image processing apparatus comprising a verifying unit in which an operator performs an input operation for verifying an image belonging to a group of images in which correction is performed in different directions for the proper amount of image correction automatically computed by the image correcting amount computing unit wherein the image is a failure image and the group of the images in which the correction is performed in the different directions is a group that contains images taken with unusual types of light source and images having a color failure, and a group that contains images taken with backlight and images taken with an electronic flash.

### ***Conclusion***

5. Claims 13 and 15 are rejected, claim 16 is objected and claims 1-12, 14, 17-24 are allowed.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine AV Nguyen whose telephone number is 571 272-7466. The examiner can normally be reached on Monday, Tuesday, Thursday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on 571 272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Madeleine AV Nguyen  
Primary Examiner  
Art Unit 2626

November 22, 2005